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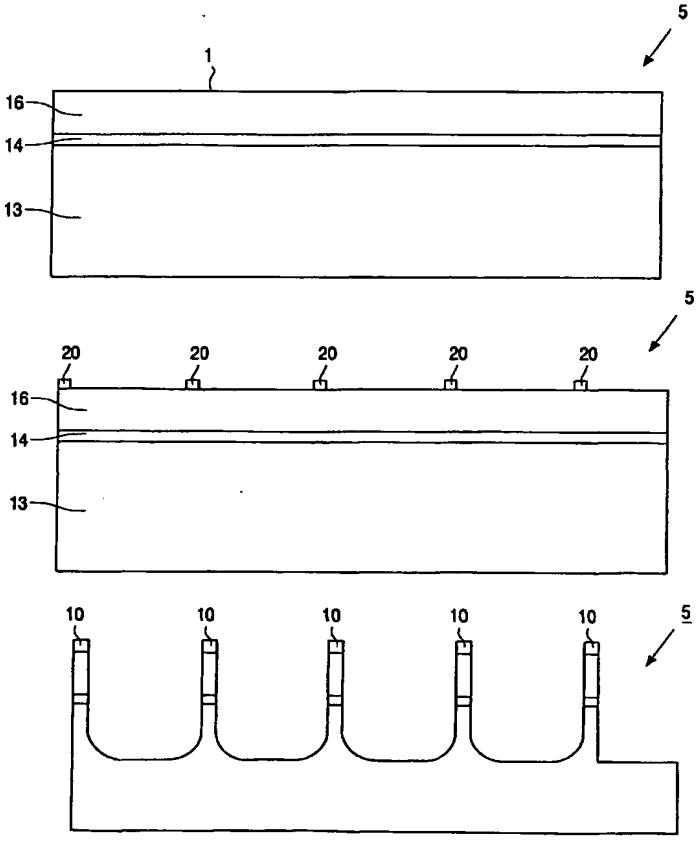
(54) Title: METHOD OF MANUFACTURING NANOWIRES AND ELECTRONIC DEVICE



(57) Abstract: In the method, semiconductor substrates are etched to provide nanowires, said substrates comprising a first layer of a first material and a second layer of a second material with a mutual interface, which first and second materials are different. They may be different in the doping type. Alternatively, the main constituent of the material may be different, for example SiGe or SiC versus Si, or InP versus InAs. In the resulting nanowires, the interface is atomically sharp. The electronic devices having nanowires between a first and second electrode accordingly have very good electroluminescent and optoelectronic properties.

WO 03/083919 A3

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L21/306 H01L21/3063 H01L21/3065 H01L21/308 H01L29/12
H01L33/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	NASSIOPOULOS A G ET AL: "Electroluminescent solid state devices based on silicon nanowires, fabricated by using lithography and etching techniques" THIN SOLID FILMS, ELSEVIER-SEQUOIA S.A. LAUSANNE, CH, vol. 297, no. 1-2, 1 April 1997 (1997-04-01), pages 176-178, XP004125990 ISSN: 0040-6090	1-4,8,9
Y	page 176, right-hand column; figure 1	7

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Wolff, G

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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